

We claimed:

1. An access method of a user terminal for combining a CDMA system and a Wireless Local Area Network, characterized by using the CDMA system to authenticate a WLAN user terminal.

2. The method according to claim 1, wherein the method comprises:
the WLAN user terminal making an access dial-up to request for accessing to a wireless access point gateway of the WLAN;

the wireless access point gateway requesting a packet data service node of the CDMA system to set up a data link for the WLAN user terminal;

the CDMA system authenticating the WLAN user terminal requesting for access;
and

upon the successful authentication of the WLAN user terminal by the CDMA system, setting up the data link for the WLAN user terminal.

3. The method according to claim 2, wherein the step of the WLAN user terminal making an access dial-up further comprises:

the WLAN user terminal making a PPPoE dial-up to send a request for access to the wireless access point gateway of the WLAN.

4. The method according to claim 2, wherein the step of the wireless access point gateway requesting a packet data service node of the CDMA system to set up a data link for the WLAN user terminal further comprises:

the wireless access point gateway determining whether the WLAN user terminal requesting for access is allowed to access; and

when the wireless access point gateway allows the WLAN user terminal to access, returning a response to the WLAN user terminal, and sending a request for setting up an R-P connection to the packet data service node of the CDMA system.

5. The method according to claim 2, wherein the step of the CDMA system authenticating the WLAN user terminal requesting for access further comprises:

the packet data service node of the CDMA system receiving the request for setting

up the data link for the WLAN user terminal from the wireless access point gateway of the WLAN, and notifying an authentication, authorization and accounting server of the CDMA system to authenticate the WLAN user terminal; and

the authentication, authorization and accounting server authenticating the WLAN user terminal according to the information of the WLAN user terminal, and sending the authentication results to the packet data service node.

6. The method according to claim 5, wherein the step of the CDMA system authenticating the WLAN user terminal requesting for access further comprises:

the authentication, authorization and accounting server determining whether the WLAN user terminal has CDMA information based on the information of the WLAN user terminal, and if yes, the authentication, authorization and accounting server returning the IMSI of the WLAN user terminal to the packet data service node; and

the packet data service node receiving the IMSI, and determining the WLAN user terminal having the access function of the CDMA2000 1X system, otherwise determining the user terminal being only a WLAN user terminal.

7. The method according to claim 2, wherein the step of setting up the data link for the WLAN user terminal further comprises:

the packet data service node allowing to set up the data link with the WLAN user terminal, and sending an R-P connection setup response to the WLAN user terminal; and

the WLAN user terminal starting to transmit data, and the CDMA system billing for the data transmission of the WLAN user terminal.

8. The method according to claim 7, wherein the step of the WLAN user terminal starting to transmit data further comprises:

starting to transmit data between the WLAN user terminal and the packet data service node; and

the authentication, authorization and accounting server of the CDMA system billing during the data transmission of the WLAN user terminal based on the

information of the WLAN user terminal.

9. The method according to claim 1, wherein the WLAN user terminal is only a WLAN user terminal or a double-mode user terminal having both the functions of the WLAN and the functions of the CDMA system.

10. The method according to claim 3, wherein the requests transmitted between the WLAN user terminal and the wireless access point gateway are PPPoE packets.

11. The method according to claim 4, wherein the requests transmitted between the wireless access point gateway and the packet data service node are PPP packets encapsulated in a tunnel.

12. The method according to claim 2, wherein a standard R-P interface is used between the wireless access point gateway and the packet data service node.